

# NEW DISCOVERIES ALL OVER THE EARTH

## Why SIGNS That MOVE and FLASH Are GOOD FOR US

By WILLIAM LEE HOWARD, M. D.

ALL physical movements of our own or the stimulation due to watching the rhythmic motion of others and objects flashing before the eyes, cause an enorgement, that is to say, a congestion of certain blood vessels. Especially is this seen in the brain and internal organs. Whether we are tangoing or witnessing the moving colors of a musical chorus or opera ballet, we are in a state of pleasurable concentration and stimulation.

All states of well being are accompanied by an increase of power. This power is extraordinarily increased where the blood vessels are engorged. Here, the great French scientist, has shown that to watch a colored disk when in motion produced stronger contractions than when the same disk was motionless.

In the same manner a state of hypnosis can be induced due to the intense concentration. If in this state strong suggestions are made that the hypnotized person will see ever before his gaze a certain color or set of words, that he will have recorded upon his memory certain facts, the height of advertising by suggestion will have been reached.

All successful advertising is pure suggestion—an im-

pression made upon the mind while it is concentrated upon certain facts or words, and in order to get this concentration some kind of flashing lights and colors are used where crowds pass every minute. But we must not flatter ourselves that we have discovered something new—something man-made. Nature has always used this method of advertising her wares and in details surpasses man.

The best example of a flashing colored advertisement is the peacock's tail. This magnificent bird when he



"The tango advertises a dancer's grace and makes you eager to have her for a partner again."

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When the doe and fawn are feeding the buck will stand on a slight eminence watching for enemies. When he sights a man or fourfooted enemy he goes the flashing, whirring white sign. He immediately leaps and off to the mother and fawn. The buck will leap and run, tail up, flashing against the sun, and it can be seen at a great distance by other deer. It advertises danger. When the buck wishes to advertise his personal perfection he stands against the wind, tail erect, slowly moving to and fro so his glistering hairs are seen.

These flashing signs of the animals act upon their kind just as a strong sign does upon a human being. They send a rush of blood to the vessels of the brain and bring on quick action of movement and thought. The whole secret of memory impressions depends upon concentration and an external object which can become this concentration is the memory upon that object, not for the time being only, but for some time after—perhaps for a lifetime. Repetition is necessary to get the proper amount of attention and repeated attention brings concentration. This is why successful advertisers use few words, constantly repeated, to call attention to their wares.

Now for the ordinary person objects attract attention quicker than the printed words on signs. When this ob-



"The magnificent tail with which the peacock calls his mate is the best example in nature of the colored flashing advertisement."

ject is a moving one, colored and flashing, the extra blood sent to the brain vessels causes a feeling of well being which enhances the memory cells, and, of course, memory. From this condition arises curiosity. It is curiosity that makes the world progress. It is this state of mind that causes scientists, historians, all scholars, to investigate and produce.

## A NEW and EASIER Way to SWIM

TO swim and to float is more easily learned than dancing. The difficulty is that when the average adult feels a splash of water in his face he flies into a panic. Water is so strange to most humans that they gasp, splutter and suck or breathe it in and drown. It is physically impossible to drown if you do not inhale and in-

spire water. The superior weight relatively of your head to your body has a tendency to press down upon your body, to force both head and trunk beneath the waves. If, however, you keep your mouth shut and avoid breathing in any water you cannot sink. The air in your lungs will hold you up.

A dog learns to swim intuitively for this very reason. Its nose is like the vent pipe of a submarine. It sticks so far up out of the water that the "dog paddle" efforts of its untrained paws carry it wherever it cares to go in the water. Dogs, therefore, take to water as a duck does.

Nothing that swims, however, not even the duck, has any advantage over children under ten. At this age a child's head, unlike an adult's, tends to bob around and float in such wise that the face points heavenward. At eleven and twelve and later the head grows heavier and cannot be bent so far backward. If J. Bummer, the authority on swimming, says that children and horseback riders learn the popular but least useful and most difficult

swimming stroke, the breast stroke, more easily than any one. It requires even good athletes three years to learn this stroke.

This stroke begins with a prayerful attitude of the hands. These are shot forward and "kicked away" at the same time by the feet. The palms no longer meet. Those who stick to this stroke face the palms downward and the arms do not come back farther than on a line with the chest.

The safest, fastest and best swimming stroke is one of recent invention. It is an improved crawling stroke. The legs and feet in the first modification of this were not used at all. Progress and speed were wholly made by the arms, just as is the case when a baby crawls.

But the newly invented crawl strokes obtain considerable power from the ankles and legs. The crawl strokes are far the easiest and most efficient of all methods of swimming. The head is more or less under water all the time. Air is exhaled under water. The head is allowed to roll with the body and never held forcibly in one position.

## How EYES ARE IN DANGER When a GOLF BALL EXPLODES

FEW golf players realize that under certain conditions the ball which they follow over the links may become as dangerous as a small-sized dynamite bomb. Only a few weeks ago a well-known English player narrowly missed the loss of his sight through the explosion of a ball which hurled with terrific force into his face and eyes a quantity of powerful alkali that burned the flesh like vitriol.

The victim of this unusual accident was discussing the merits of a certain make of

ball in the clubhouse. To settle some argument as to its composition he began stripping the ball of its outer cover and of the right rubber bandaging which lies beneath.

All went well until the inner liquid core was pierced in an effort to get rapidly at the mystery of the center. Then there was a sharp report and the semi-fluid mass which formed the inside of the ball burst with such force that it was scattered all over the walls, floor and ceiling of a large room.

The man who held the ball received a large quantity of the liquid full in the face,

It caused the most intense pain and blinded him. For weeks his sight was dimmed, but now, thanks to the best of surgical treatment, he is able to see again. He will, however, carry scars to his grave as a reminder that some golf balls are extremely dangerous things to try to dissect.

The possibility of a golf ball behaving in this surprising way is not generally known, and is a matter against which the public should be warned. After a ball becomes so useless as to be of no further use on the links the rubber it contains is still of considerable value. As this Englishman's experience shows, however, attempts to remove this material from a charged ball are liable to prove disastrous unless the greatest caution is used.

Golf balls like the one which caused this accident are made with an inner liquid core of caustic consistency, subjected to the considerable pressure of its tight elastic envelope. Even a ball if not carefully handled, contains all the possibilities of a bomb.

The pressure exists only so long as the liquid core is held tight in its tense rubber banding. If at this stage the core is punctured in any way its contents will be ejected with great force.

The liquid core usually consists of an alkaline substance more powerful than ordinary soft or potash soap. It acts as a corrosive in much the same way as free caustic alkali and is easily capable of damaging the sensitive tissues of the eye beyond hope of repair.

## Just What TUBERCULAR PEOPLE SHOULD EAT

ACCORDING to the latest investigations, the consumptive's diet should include substances rich in fat and as easy as possible of digestion. On this account brains and sweetbreads should stand first in the diet for the tuberculous. The same can be said of eggs, the reputation of which as an important dietary factor is well known. But in advocating their use one should not go to the lengths that have characterized the advice of some physicians, who give their patients daily what is really a fantastic number. Not only constipation, but gastric disturbances will result from the use of too many eggs.

As to meat, of which too great a quantity was for-

merly given, a moderate amount is now thought all that is necessary, and even so, it should not be the principal part of the diet. Meat, unless mixed with other substances, causes emaciation, and, moreover, may cause a toxemia, a complication which has a bad effect on the tuberculous. Hence, the quantity of meat should never be large or dominate all other food stuffs. Ham and chicken, and kidneys, lungs and liver, all of which contain cholesterol, should be included in the diet. Liver, especially, will be found to be of great service on account of its otopherapeutic qualities. Game, pork, meat extracts and meats put up in this, should be strictly eschewed.

Raw meat, contrary to what has been thought, is no longer considered indispensable; in fact, not even useful in the majority of cases. It should be given only occasionally, and when poorly tolerated some other substance should be substituted until tolerance is re-established. Animal fats that do not contain cholesterol should not be included, since they may be difficult to digest. On the other hand, fish oil, milk, by reason of their composition, rank high as factors in the diet for the tuberculous.

The utility of milk has been known for some time,

but also in this instance, as has already been pointed out in the case of eggs, the tendency has been to abuse the quantity. To-day the drinking of it during meals is considered injurious, since it overfills the stomach, thus retarding and interfering with digestion.

Vegetables should constitute an important part of the diet, since they are less toxic than meats. But the principal reason why they should be given is that in tuberculosis there is a decided elimination of the phosphates, which causes the anemia. Vegetables, because of their containing phosphorus and iron in goodly quantities and in a state that is assimilable, can counteract the bad results following this elimination. They also contain salts of lime and magnesia, which are of great benefit to tubercular organs.

Peas, beans and lentils contain, according to Professor Armand Gautier, phosphorus in its most easily assimilated form. They should, therefore, be used abundantly. Iron and lime salts are found more especially in green vegetables. This property of the diet is essential for another reason, since it counteracts constipation, to which both meat and eggs conduce. Fruits also possess this advantage and are to be recommended.

## How We Got Those FUNNY LITTLE DACHSHUNDS

THE dachshund, or German badger dog, which is so popular with the bench show exhibitors just now, is no mere fad of the moment. As a matter of fact, he is one of the longest pedigreed breeds or varieties of domesticated dogs in existence. From the year 2,600 B. C. when, as ancient inscriptions show, he was the pet of Dhotmes III., ruler of Egypt,

he has always enjoyed the favor of persons of high degree.

The dachshund is now looked upon as a distinctly German breed. It is said that there were no dachshunds in the Fatherland until after the French revolution, when the French refugees or emigrants took the French dachshunds with them to their new homes. That contention, how-

ever, is not generally considered well founded.

The dachshund is considered to be the national dog of Germany. He is what the bulldog is to the English, the poodle to the French, the borzoi to the Russian and the Boston terrier to the American. The rough dachshund is perhaps more a native of the south, and there may be a cross of the old spaniels of Hungary and Transylvania in his make-up.

To the dog fancier the legs are among the more important parts of the dachshund. They should come down from the chest, which is broad and massive, slope well toward one another till the ankle joints nearly touch, the chest dropping down to the ankles." One writer remarks that the fore feet should be "an inch from the chest," turn away from one another and spread out. A dog, however, with only an inch between chest and feet would have great difficulty in traveling as a working dog, and it is a pity that the breeders of the hand perfectly sound in his front and possessing a perfect crook.

Hunting and beating the badger is the acknowledged task of the dachshund. By the use of his good voice and persistent ways he has always been found a most useful dog for those purposes. The dachshund is a keen-nosed and sensible dog.

enter into a state of vibration while listening to good music. The emotion produced brings a strange agitation in the circulation of the blood and my arteries throbb with violence. It is for me the best of stimulants." The proper selection of music is most important, for some melodies accelerate the pulse, while others retard it. Again as music starts up the circulation it also makes respiration more frequent, although more superficial and less profound. The glands of the stomach are healthily excited, so that food is more readily digested, and it is this fact which makes music so beneficial to dyspeptics.

In the treatment of consumption, however, music is something to be avoided or used with the greatest caution. With the great majority of sufferers from tuberculosis it has a tendency to run the temperature up just as the reading of an exciting novel or letter writing often will.

cases was the child up to its proper weight. To cure a child of this harmful habit it should be fed small quantities of foods which do not provoke rumination. Rest and quiet are recommended. The cure of an adult sufferer is much more difficult. It will often be found that chewing the cud in a grown man or woman is often the result of conditions similar to those which produce vomiting.

## Why AUTOS NEED TWO HORNS

EVERY automobile should be equipped with two horns. One should have a low, agreeable sound for use in the city where a minimum of noise is desirable; the other, a loud, shrill sound for use in the country, where it is necessary to carry the note of warning far.

This is the advice given by Professor Francois Marazl, a distinguished French scientist who has just completed a practical study of the effects produced by different kinds of noise with special reference to automobile horns. He was led to undertake his investigations by the fact that many towns in France and other European

countries have lately passed ordinances prohibiting the use of the siren, which, while very effective as a warning, is extremely annoying to the nerves of everybody within earshot.

In order to decide what kind of a horn an automobile should use, Professor Marazl executed pieces of music upon various ancient and modern instruments before an audience of hundreds chosen from many different walks in life.

The general result was that high-pitched sounds produced a more disagreeable impression on the ears than those of low pitch. And this is why the professor recommends that low-pitched horns be used on automobiles whenever practicable.

of the good effect of rhythm. A delicate young girl is capable of dancing half the night without fatigue because her motive regions are excited by the rhythmic vibrations of the musical instruments."

It is well known that certain kinds of music provokes muscular contraction just as intense cold does. When

one exclaims that some pieces make "goose flesh" on their skin they do not know that the cause is the contraction of the minute muscles. But it is not the muscles alone that are excited by vibrations—the pulse is equally influenced.

Berlioz, the composer, once wrote a friend: "All my being seems to

enter into a state of vibration while listening to good music. The emotion produced brings a strange agitation in the circulation of the blood and my arteries throbb with violence. It is for me the best of stimulants."

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## How MUSIC HELPS DYSPEPTICS but HARMS CONSUMPTIVES

ARE you a neurasthenic or a dyspeptic? Then take the new music cure which is prescribed by Dr. Cabanes, the well-known French physician.

There are complications to be avoided in this seemingly simple remedy, as the doctor points out. One danger lies in the sensual oborption of the wrong kind of music. For instance, a predominance of too much brass in an orchestra has a tendency to aggravate the condition of tired nerves or an ailing stomach.

The rhythm in music is said to be a most important factor in the cure. It acts directly on the motive powers by developing new energy or awakening latent energy.

Dr. Cabanes often, as an example the music treatment given by the late Dr. Recamier, celebrated for his success in curing dyspepsia. He ordered his patients to go every night to the Place Vendome to wait for the drummer boys who head the

troops. When the drummers appeared the patients were told to march with them to the barracks, keeping step with the music. This was to get the rhythm to stimulate the proper functions of the digestive organs.

"Every day," says Dr. Cabanes, "you have under your eyes evidence

## Why Our TEETH NEED EXERCISE

It is a curious thing, is it not, that bright children should fall of promotion in the public schools because they have deficient teeth? That may not be the case in every city, but it is true in Boston, according to a report recently made by Dr. William P. Cooke at the Harvard Medical School.

Dr. Cooke says that children are not promoted in the Boston schools if they are physically defective, and that a great deal of the physical defectiveness which interferes with their promotion is due to diseased teeth. Of 121,369 defects recently noted in school children, 168,841 came from their teeth.

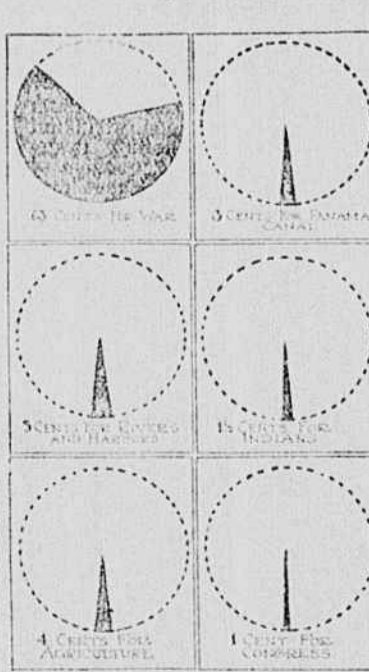
He also says that most of this trouble is the result of eating candy, so that a child may actually thwart his educational hopes by means of the candy habit.

Also, one of the causes of bad teeth is soft food. Dr. Cooke declared that savages have little trouble with their teeth because their food is hard. Among civilized peoples, however, 58 per cent have decayed teeth because the food of civilization is soft and does not afford enough exercise for the teeth.

There is a basis of good philosophy for the dislike of farmers and sailors for soft food, and their demand for tough meats and other substances that they can "lay their jaws to." They know the value of exercise for the teeth.

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## What Uncle Sam Does with YOUR MONEY



ALTHOUGH the national Government's accounts are kept in a far less intelligible way than that of any great private business enterprise, it is possible with a little effort to analyze them enough to ascertain just what Uncle Sam does with every dollar that he receives. Such an analysis brings to light many facts which are likely to surprise even those who think themselves familiar with the Government's expenditures.

For example, we pride ourselves on being a peace-loving nation and laugh at the folly of Europe's enormous armies and navies. Yet we spend more in preparation for war than for any other one thing. Out of every dollar Uncle Sam receives 63 cents goes to maintain the army and navy.

The next largest expense—5 cents out of every dollar—is for rivers and harbors. The Panama Canal costs 3 cents; agriculture, fisheries and forestry, 4 cents; the Indians, 1½ cents; and Congress, 1 cent. The remainder of every dollar goes to meet miscellaneous expenses and to maintain a surplus in the Treasury.